

ABSTRACT

A fingerprint verification method having band detection is provided. In one embodiment, the method includes capturing a fingerprint image and processing the image to determine if it includes bands attributable to changes in illumination intensity during image capture. If such bands are detected, the method preferably aborts the creation of a fingerprint template. Otherwise, if this and other security screens are passed, the method preferably includes the creation of a fingerprint template which may be compared to a stored fingerprint template to verify user identity. If such verification is established, the user is granted access privileges. One embodiment of a system implementing this method includes a fingerprint scanner for capturing fingerprint images, and an interface card having a digital signal processor (DSP) or other suitable mechanisms including software or electronics for processing the fingerprint images and generating a fingerprint template representative of the images. The system may further include a general purpose computer coupled to the interface and configured to receive the fingerprint template. The general purpose computer can then use the fingerprint template to verify the identity of the user.